

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Fixed and Mobile Services in the Mobile)	ET Docket No. 10-142
Satellite Service Bands at 1525-1559)	
MHz and 1626.5-1660.5 MHz, 1610-)	
1626.5 MHz and 2483.5-2500 MHz,)	
and 2000-2020 MHz and 2180-2200 MHz)	

COMMENTS OF VERIZON WIRELESS

Verizon Wireless hereby responds to the above-captioned Notice of Proposed Rulemaking and Notice of Inquiry (“NPRM” or “NOI”), which seek comment on the steps the Federal Communications Commission (“FCC” or “Commission”) can take to increase the value, utilization, innovation, and investment in the Mobile Satellite Service (“MSS”) bands.¹

Verizon Wireless agrees that “[w]ireless broadband is poised to become a key platform for innovation in the United States over the next decade,”² and commends the FCC for quickly identifying specific spectrum bands that may be used for future mobile use. As the National Broadband Plan found, “[t]he growth of wireless broadband will be constrained if government does not make spectrum available to enable network expansion and technology upgrades . . . [resulting in] higher prices, poor service quality, an inability for the U.S. to compete

¹ *Fixed and Mobile Services in the Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz*, Notice of Proposed Rulemaking and Notice of Inquiry, 25 FCC Rcd 9481 (2010) (“NPRM” or “NOI”).

² Federal Communications Commission, *Connecting America: The National Broadband Plan*, at 75 (rel. Mar. 16, 2010) (“FCC National Broadband Plan”).

internationally, depressed demand and, ultimately, a drag on innovation.”³ For these reasons, Verizon Wireless fully supports the Commission’s goal of making 500 MHz of spectrum available for wireless broadband in the next ten years.⁴

Importantly, the vast majority of the new spectrum that will be needed for wireless broadband in the future is already assigned to other uses. However, there are a variety of mechanisms that the Commission can use to promote spectrum repurposing and, as a result, increase the availability of spectrum for wireless broadband use. This includes a requirement for incumbents to relocate out of the band,⁵ an overlay auction which would allow incumbents to buy increased spectrum rights,⁶ and/or an outright grant of increased flexibility to incumbents.⁷ If the Commission were provided the authority, the use of voluntary incentive auctions would

³ *Id.* at 77. *See also* The White House, *Presidential Memorandum: Unleashing the Wireless Broadband Revolution* (rel. June 28, 2010) (“Spectrum Presidential Memorandum”) (“America’s future competitiveness and global technology leadership depend, in part, upon the availability of additional spectrum. . . . Expanded wireless broadband access will trigger the creation of innovative new businesses, provide cost-effective connections in rural areas, increase productivity, improve public safety, and allow for the development of mobile telemedicine, telework, distance learning, and other new applications that will transform Americans’ lives.”).

⁴ FCC National Broadband Plan at 84-93. *See also* Spectrum Presidential Memorandum (directing NTIA to collaborate with the FCC “to make available a total of 500 MHz of Federal and nonfederal spectrum over the next 10 years, suitable for both mobile and fixed wireless broadband use”).

⁵ *See Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies*, First Report and Order and Third Notice of Proposed Rulemaking, 7 FCC Rcd 6886 (1992); Third Report and Order and Memorandum Opinion and Order, 8 FCC Rcd 6589 (1993); Memorandum Opinion and Order, 9 FCC Rcd 1943 (1994).

⁶ *See Amendment of Part 90 of the Commission’s Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band*, Second Report and Order, 12 FCC Rcd 19079 (1997).

⁷ *See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 14165 (2004).

also represent a viable option for repurposing valuable spectrum.⁸ Verizon Wireless does not believe the Commission should rely on any single mechanism but, depending on the specific circumstances, should choose that option that will be most effective for repurposing a particular spectrum band.

In the case of the 2000-2020 MHz / 2180-2200 MHz (“2 GHz”) MSS band, Verizon Wireless believes that a voluntary incentive auction would be most effective at repurposing spectrum for other uses. Consequently, the Commission should work with Congress to establish the requisite statutory authority to facilitate such auctions. As a step toward meeting that ultimate goal, we support the Commission’s recommendation to add co-primary Fixed and Mobile allocations to the 2 GHz band. Finally, the application of the Commission’s spectrum leasing rules to all MSS bands will facilitate the potential use of the spectrum for wireless broadband through licensees’ existing ATC authority while the Commission considers various alternatives for making the spectrum available for wireless broadband.

I. THE COMMISSION SHOULD ADD CO-PRIMARY FIXED AND MOBILE ALLOCATIONS TO THE EXISTING MOBILE-SATELLITE ALLOCATION IN THE 2 GHZ BAND.

Verizon Wireless fully supports making the 2 GHz band available for terrestrial wireless broadband. The 2 GHz band is suitable for mobile use and its repurposing would assist the Commission in achieving its goal of 500 MHz of new spectrum. Among other things, this band is between 400 MHz and 5 GHz, which the ITU has concluded is the spectrum most suitable for mobile communications.⁹ Spectrum bands in this range allow sufficient mobility, while also

⁸ See Public Safety Spectrum and Wireless Innovation Act, S. 3756, Staff Working Draft, Aug. 4, 2010.

⁹ Technical and Operational Information for Identifying Spectrum for the Terrestrial Component of Future Development of IMT-2000 and IMT-Advanced, Report ITU-R M.2079, 6 (2006).

affording an acceptable trade-off between coverage and cost. Thus, the 2 GHz band would be ideally suited for exclusive wireless broadband use.

As a first step toward this goal, the Commission should add co-primary Fixed and Mobile allocations to the already existing Mobile-Satellite allocation for the 2 GHz band.¹⁰ As the NPRM acknowledges, however, these additions do not change the underlying service rules for the 2 GHz band and licensees must continue to comply with all existing rules and policies, including the ATC gating criteria.¹¹ While the addition of co-primary Fixed and Mobile allocations to the 2 GHz band alone will not free up this band for terrestrial wireless broadband use separate and distinct from MSS, it will provide the Commission with greater flexibility and pave the way for a future voluntary incentive auction of this spectrum.

II. THE COMMISSION SHOULD APPLY ITS SECONDARY MARKET RULES TO THE MSS BANDS.

The Commission's spectrum leasing rules were adopted to promote more efficient, innovative, and dynamic use of terrestrial wireless spectrum.¹² Under these rules, exclusive use Wireless Radio Service licensees may lease some or all of their spectrum usage rights to third parties, who may then provide wireless services consistent with the underlying license authorization.¹³ As a result, wireless licensees have considerable flexibility—as well as a

¹⁰ See NPRM at ¶ 10.

¹¹ *Id.* at ¶ 13 (“The existing service rules continue to permit MSS and ATC operation and are not altered by the re-introduction of a Fixed and Mobile allocation to the band.”).

¹² *Promoting Efficient Use of Spectrum through Elimination of Barriers to the Development of Secondary Markets*, Report and Order and Further Notice of Proposed Rulemaking, 18 FCC Record 20605 (2003) (“*Secondary Markets 1st R&O*”), Erratum, 18 FCC Rcd 24817 (2003).

¹³ *Secondary Markets 1st R&O* at ¶¶ 8-9, 12-13, 91-92.

powerful financial incentive—to make unused spectrum available to other carriers through spectrum leasing.

These rules have proven extremely effective at allowing spectrum to flow to its best and most efficient use as demand and supply conditions change.¹⁴ As Verizon Wireless demonstrated in its recent comments on the state of competition in the wireless industry,¹⁵ the number of spectrum lease applications/notifications filed has grown rapidly and is now averaging around 555 per year.¹⁶ Indeed, as of July 28, 2010, there were 2,378 active spectrum leases listed in ULS.¹⁷ Of those, 2,154 were “long term,” 1,843 of which involve arrangements where the lessee has *de facto* control over use of the spectrum.¹⁸ To analyze the efficacy of the leasing option, Verizon Wireless undertook an examination of ULS data related to active leases of broadband PCS spectrum. Verizon Wireless selected broadband PCS as representative of a market-area licensed service appropriate for leasing (unlike cellular, which is largely site-licensed, and the BRS/EBS band, where a large number of leases pre-date the lease filing system and are therefore unavailable for analysis):¹⁹

¹⁴ See JOHN W. MAYO AND SCOTT WALLSTEN, ENABLING EFFICIENT WIRELESS COMMUNICATIONS: THE ROLE OF SECONDARY SPECTRUM MARKETS 2 (June 2009), <http://cbpp.georgetown.edu/75849.html> (“MAYO-WALLSTEN”).

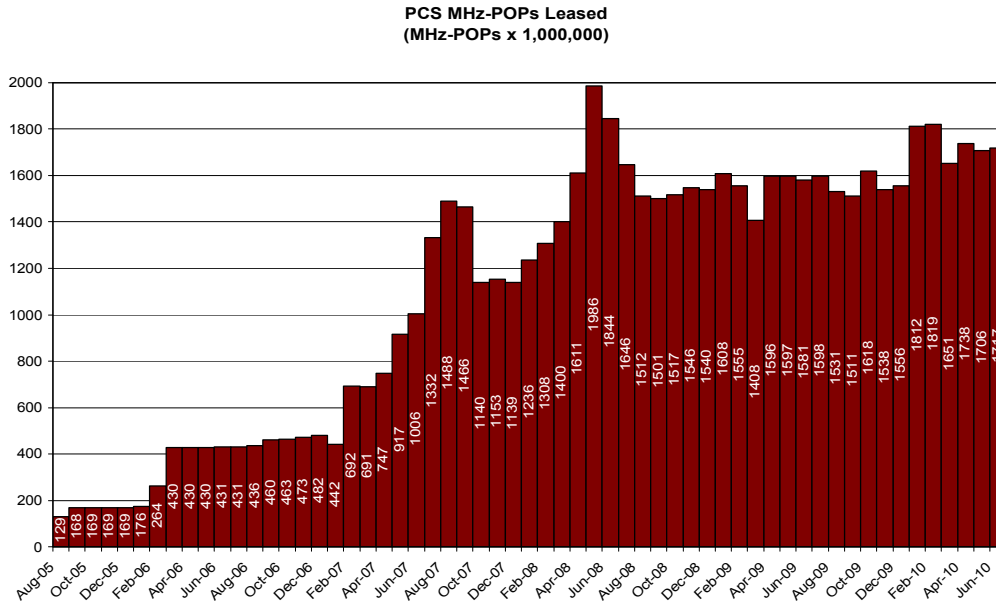
¹⁵ Comments of Verizon Wireless, WT Docket No. 10-133, at 34-40 (filed July 30, 2010).

¹⁶ See ULS Advanced Application Search, <http://wireless2.fcc.gov/UlsApp/ApplicationSearch/searchAdvanced.jsp> (last visited July 8, 2010). Verizon Wireless limited its search to new lease applications/notifications (Application Purpose “LN”), excluding amendment applications, filed in each of the last three years.

¹⁷ See ULS Lease Search, <http://wireless2.fcc.gov/UlsApp/UlsSearch/results.jsp> (last visited July 28, 2010).

¹⁸ *Id.*

¹⁹ ULS lease data for PCS authorizations, database extract for Market Based Services as of September 20, 2009 for the period August 2005 - September 2009. For the period October 2009



Total Broadband PCS MHz-POPs Subject to Lease

These results demonstrate that, in fact, spectrum leasing is thriving.

Spectrum leasing could prove similarly successful in the MSS bands as “MSS licensees and their lessees [could] use their ATC authority to provide mobile broadband services.”²⁰ In order to ensure consistent treatment of all mobile broadband services, regardless of whether they are supplied by a terrestrial provider or a MSS ATC provider, the Commission should apply the Commission’s existing spectrum leasing rules to the MSS bands.²¹ As the Commission notes,

- June 2010, Verizon Wireless utilized an extract from the Market Based Services database dated July 4, 2010. Data limited to “CW” (PCS) leases in HD table, and net additions/subtractions to total amounts under lease derived by multiplying POPs, as defined in MP table, by frequency bands under lease as shown in MF table, and summing by lease. Leased MHz-POPs increased upon Grant Date for lease in HD table and subtracted upon Cancellation Date shown in HD table. Does not include a small number of leases for undefined areas where POPs in MP table was zero or null value. More information regarding the data contained in ULS records can be found in the ULS data dictionary, ULS Data File Formats (Feb. 12, 2009), http://wireless.fcc.gov/uls/data/documentation/pa_ddef38.pdf.

²⁰ See NPRM at ¶ 22.

²¹ *Id.* at ¶ 17. By extending these spectrum leasing rules to MSS, the Commission would adopt a generally applicable regulatory framework for MSS/ATC leasing arrangements, thereby mooting any purported purpose of the conditions imposed in the bureau-level Harbinger-

“such action would create greater predictability, consistency, and transparency between all spectrum leasing arrangements involving terrestrial-based mobile service offerings.”²² In addition, these rules would allow the Commission to evaluate and review MSS/ATC spectrum leasing arrangements to determine their impact on the public interest.²³

The application of these rules to MSS, however, should not be used to circumvent the Commission’s existing MSS rules, including the ATC gating criteria. Instead, as with Wireless Radio Services lessees,²⁴ lessees of MSS spectrum should be required to comply with the Communications Act and the Commission’s policies and rules that apply to the underlying licensees.

III. THE COMMISSION SHOULD WORK WITH CONGRESS TO IMPLEMENT VOLUNTARY INCENTIVE AUCTIONS.

In the Notice of Inquiry, the Commission seeks input on how it can best increase the value, utilization, innovation, and investment in the MSS bands.²⁵ Verizon Wireless fully supports this initiative and applauds the Commission for considering a variety of ways in which to make MSS spectrum, particularly the 2 GHz band, available for wireless broadband use.

In particular, Verizon Wireless strongly supports the implementation of voluntary incentive auctions and encourages the Commission to work closely with Congress to adopt and

SkyTerra order that restrict dealings with Verizon Wireless (and AT&T). *See Ex Parte* Letter to FCC from Verizon Wireless, IB Docket No. 08-184 *et al.* at 1-2, 5 (July 6, 2010); *see generally* Verizon Wireless, Petition for Partial Reconsideration, IB Docket No. 08-184 (Apr. 1, 2010). The Commission should thus grant Verizon Wireless’s petition for reconsideration and eliminate conditions 1 and 3 in the Harbinger-SkyTerra order.

²² NPRM at ¶ 22.

²³ *Id.*

²⁴ *See* 47 C.F.R. §§ 1.9020(c)(1); 1.9030(c)(1); 1.9035(c).

²⁵ NOI at ¶ 26.

implement legislation authorizing this type of auction.²⁶ As the National Broadband Plan notes, voluntary incentive auctions are “a practical, market-based way to reassign spectrum.”²⁷ Indeed, incentive auctions provide incumbent licensees significant incentives either to fully and efficiently utilize their spectrum or return it so it may be reallocated or relicensed for a more productive use.

If voluntary incentive auctions are implemented for the 2 GHz band, licensees should not be allowed to relinquish only a portion of their spectrum. Instead, 2 GHz licensees should be required either to turn in their entire license by a set date if they wish to participate in the auction or to retain their license subject to all existing regulations. To allow otherwise could result in a piecemeal approach through which only small amounts of spectrum would be returned at any one time, leading to insufficient spectrum being reallocated for wireless broadband. For example, if one of the 2 GHz licensees decided to return half of its spectrum and the other decided to retain its complete license, only 10 megahertz (5 megahertz in each direction) of 2 GHz spectrum could be made available for wireless broadband, which is far less than is required for any wireless broadband deployment.²⁸ In addition, requiring MSS licensees to relinquish or retain their entire license would help limit the risk of harmful interference that could result from operating a terrestrial wireless system in close proximity to a MSS system.

²⁶ *Id.* at ¶ 28.

²⁷ FCC National Broadband Plan at 82.

²⁸ *See, e.g.*, Comments of Verizon Wireless, ET Docket No. 10-123, at 4 (filed June 28, 2010) (citing Comments of Verizon Wireless, GN Docket Nos. 09-157, 09-51, at Attachment A – LTE: The Future of Mobile Broadband Technology (filed Sept. 30, 2009)) (“The current LTE standard supports configurations up to 2 x 20 MHz”); Third Generation Partnership Project, 3GPP Partners Propose LTE-Advanced Radio Technology, Press Release, *available at* <http://www.3gpp.org/3GPP-Partners-propose-IMT-Advanced> (noting that future enhancements to the LTE standard are expected to support even larger contiguous blocks of spectrum).

IV. CONCLUSION

Verizon Wireless concurs with the Commission that a significant amount of spectrum should be allocated for wireless broadband use over the next ten years and that the MSS bands could be repurposed for more intense commercial wireless use through the use of a voluntary incentive auction or some other method. Accordingly, Verizon Wireless supports the addition of co-primary Fixed and Mobile allocations to the 2 GHz band and the application of the Commission's existing secondary markets rules to MSS. In addition, Verizon Wireless strongly encourages the Commission to work with Congress to adopt and implement legislation authorizing voluntary incentive auctions and, in the event such authorization is received, using voluntary incentive auctions as a means of repurposing the 2 GHz MSS band for terrestrial use.

Respectfully submitted,

A handwritten signature in black ink that reads "John T. Scott, III". The signature is written in a cursive style with a horizontal line underneath the name.

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Filed: September 15, 2010